

# Environmental Assessment— Escherichia coli (E. coli)



Shiga toxin-producing *E. coli* (STEC) is typically associated with foodborne outbreaks. STEC is transmitted through contaminated food or water, person-to-person contact (fecal-oral route) and contact with contaminated equipment surfaces. STEC may be found in a food facility due to: cross contamination, improper cleaning of equipment, infected food handler and improper cooking. Foods that have been implicated in the past are romaine lettuce, ground meats, spinach, sprouts, unpasteurized milk, unpasteurized fruit juice and commercially manufactured cookie dough. Exposure can also occur with direct contact with infected animals in a petting zoo.

Some key items to focus on while investigating a suspected STEC foodborne outbreak:

- **Interview and observe**—Interview management and employees regarding their food preparation practices. Interview individuals separately if possible. Observe employees as they prepare suspect food.
- **Obtain restaurant menu**—Determine if there are any improperly cooked items to customer order.
- **Review food flows**—Determine the potential for time and temperature abuse and cross contamination of suspect food items.
- **Review Sources**—of produce, cooking practices and use of thermometers to determine internal temperatures of cooked food and use of temperature logs.
- **Review hand hygiene**—Note any issues with handwashing and bare hand contact with ready-to-eat foods.
- **Provide corrective actions**—Discuss and correct improper food safety practices while onsite.
- **Collect samples**—Find out whether any suspect food items are remaining at the establishment. If yes, set it aside and do not serve it. Notify the Indiana Department of Health and discuss if sampling would be appropriate. If yes, the Food Protection Division may assist with the coordination, collection and transport of food samples.

*When investigating E. coli infections at a food facility, focus on improper cooking, cross contamination, improper sanitization of equipment, employee illness and improper hand hygiene.*

Indiana is a voluntary participant with the CDC's National Environmental Assessment Reporting System (NEARS). Please visit the CDC's [NEARS](#) website for more information. Please contact the Indiana Department of Health Food Protection Division Rapid Response Team for assistance with the environmental assessment and completing NEARS forms, sampling supplies and any other questions regarding the environmental response for a suspected E. coli outbreak.

For assistance, please contact:

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